NERRS SCIENCE COLLABORATIVE

PROJECTS FUNDED IN 2013

Making Science Part of the Solution

The National Estuarine Research Reserve System (NERRS) Science Collaborative puts Reserve-based science to work for coastal communities coping with the impacts of land use change, stormwater, nonpoint source pollution, and habitat degradation, all in the context of climate change. The program operates by a cooperative agreement between the University of New Hampshire (UNH) and the National Oceanic and Atmospheric Administration (NOAA). We have a three-fold approach to connecting science to decision making:

—Using a competitive RFP, we fund projects that incorporate collaboration and applied science to address coastal management problems identified as priorities for Reserves and their communities.

—Through our transfer program the science we fund is shared throughout the NERRS and the communities they serve.

—Through TIDES (Training for the Integration of Decision Making and Ecosystem Science), a non-thesis Master's degree program hosted by the University of New Hampshire, we train the next generation of professionals to link science to coastal decision making.

For information about this program:

Dwight Trueblood, NOAA program manager, 603.862.3580, dwight.trueblood@noaa.gov

Dolores Leonard, Science Collaborative strategic marketing and communications manager, 603.862.3685, dolores.leonard@unh.edu

nerrs.noaa.gov/ScienceCollaborative.aspx

Sponsored Projects

The NERRS Science Collaborative has awarded $2.5 million to fund eight Reserve-based collaborative research projects that address a priority coastal management issue. These projects use the principles of participatory process to link science to coastal decision making by bringing intended users of science into the research process—from problem definition and project design through implementation of the research and the practical application of results.

Integrated Watershed Planning

Geosyntec Consultants is working with communities in southern New Hampshire to develop the foundation for an intermunicipal Watershed Integrated Plan to meet new wastewater and stormwater requirements. The project will be conducted in the Great Bay NERR watershed. (Funding: $ 438,227)

For more information contact Robert Roseen: rroseen@geosyntec.com, 978.263.9588.

Resilient Shoreline Analysis

A team led by the Hudson River NERR will conduct a detailed forensic engineering assessment of failed and resilient shoreline treatments following three historic storms, incuding "superstorm" Sandy. Findings will inform shoreline management as communities plan for climate adaptation. (Funding: $ 229,183)

For more information contact Betsy Blair: bablair@gw.dec.state.ny.us, 845.889.4745 x113

Sea Level Rise Modeling

A team led by the San Francisco Bay NERR will develop and implement a standardized protocol for tidal marsh sampling of total suspended solids (TSS). Scientists and intended users of their work will collaborate to understand tidal marsh sustainability in the face of sea level rise. (Funding: $379,795)

For more information contact Matt Ferner: mcferner@gmail.com, 415.456.6563

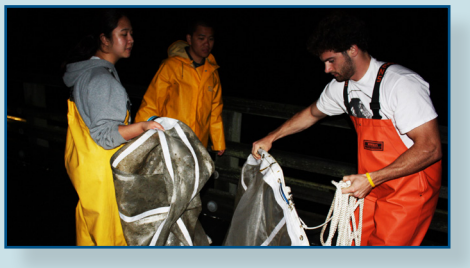
Wetland Services Assessment

A team from the Lake Superior NERR will bring local stakeholders and scientists together to develop a process for incorporating wetland science, watershed planning, and geospatial tools into decision-making at the local level. They will work with communities to reduce floods, regulate stream flows, and remove pollutants from stormwater runoff through strategic wetland protection and restoration. (Funding: $294,523)

For more information contact: Sue O'Halloran, sohallor@uwsuper.edu, 715.392.3141

Climate Variations on Ecosystems

The Jacques Cousteau NERR is partnering with the North Carolina and North Inlet-Winyah Bay NERRs to engage researchers and fisheries managers in working collaboratively to share data about the impact of climate variation on fisheries and coastal ecosystems. The team will analyze long-term monitoring data sets for habitat loss and alteration. This project will emphasize integration of data that coastal managers previously have not had access to. (Funding: $425,104)



For more information contact Lisa Auermuller: auermull@marine.rutgers.edu, 609.812.0649

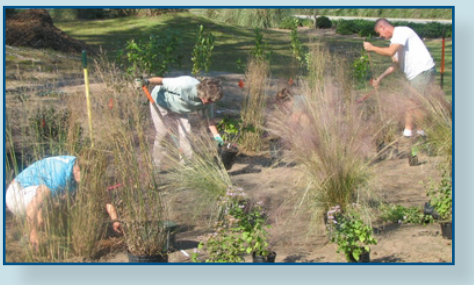
Watershed Stormwater Management

Investigators from South Carolina's ACE Basin NERR are partnering with local stakeholders to address barriers to the implementation of effective stormwater management policies in local watersheds. Data collected by the project team will enable officials to make sound, science-based policy decisions to overcome identified barriers. (Funding: $276,624)

For more information contact John Leffler: lefflerj@dnr.sc.gov, 843.953.3903.

Coastal Water Quality Restoration

A multi-partner collaboration of the North Carolina NERR, the North Carolina Coastal Federation, the University of North Carolina, and the City of Wilmington is working with municipalities and other stakeholders to test the effectiveness of coastal water quality restoration techniques designed to protect and replicate natural watershed hydrology. The team plans to disseminate what they learn through local peer networks. (Funding: $349,518)



For more information contact Lauren Kolodij: laurenk@nccoast.org, 252.393.8185.

Climate Change Vulnerability Assessment Tool

This project will test and refine the NERRS-developed Climate Change Vulnerability Assessment Tool for Coastal Habitats (CCVATCH). Local habitat managers, decision-makers, and researchers will be invited to work collaboratively to apply the CCVATCH tool to generate vulnerability scores for five coastal habitats at South Carolina's North Inlet-Winyah Bay and Chesapeake Bay, Virginia, NERRS sites. (Funding: $142,286)

For more information contact Jennifer Plunket: jen@belle.baruch.sc.edu, 843-904-9033.